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REMARKS

This Amendment is submitted in response to the Office Action dated June 23, 2005, Reconsideration and Allowance of the claims is requested. In this Office Action claims 1-4 are rejected under 35 U.S.C. §103 as unpatentable over Peterson (US. 2002/0140706). The Examiner further rejects claims 5-10 over Peterson taken further with McNamara (US 2003/0122829). These rejections are respectfully traversed. In this response, we have canceled claims 1-4 and provided a new independent claim 22 which emphasizes that in determining and altering the sub-pixel sample positions, the steps are carried out on backward compatible basis so that an accurate record may be kept of the offsets applied and samples taken. It is further emphasized in the claims and in the new independent claim 29 that the sub-pixel sample positions are altered based on the coordinate position of the pixel position being sampled. The sub pixel sample is altered using offsets stored in a memory which is accessed based on the coordinate pixel position. By adopting this approach, pixel positions on the edges of primitives may be dealt with in a consistent fashion as this is the region where aliasing is most likely to occur.

It is in the pending office action, the Examiner dealt with the use of pixel position in determining sampling positions by stating at page 3, lines 3-6 that "it is obvious to the person of ordinary skill in the art to recognize the off-set value is partially based on at least a portion of the pixel position which is a sub-pixel position".

This interpretation by the Examiner cannot be maintained in the face of the claim language of the pending independent claims. Each of these claims recites that the off-set values is based, at least in part, on a portion of the pixel position. As is well-established, the Examiner cannot contradict the plain meaning of the claims. The problem being solved herein is set out in paragraph 44, wherein it is stated that computer sub-pixel sample positions should be at consistent positions within each pixel to ensure temporal aliasing artifacts are not introduced, for example, at a line of an intersection between two primitives. Similarly, pixels at the edge of a parameter should be antialiased consistently between frames when the viewpoint has not changed. As a

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solution, the invention proposes (as found in the last sentence of paragraph 44), that rather than simply using the next sub-pixel off-set value (as is taught by the Peterson reference) when processing a fragment, a portion of the pixel position should be used to determine the sub-pixel off-set value.

Paragraph 45 describes a specific non-limiting example for using the process. In this example, it is stated that each pixel position is used to generate an index dependent on a portion of the pixel position. Further, the index function can be used to access stored off-set values. In this way, the problem identified in paragraph 44 is solved by using at least a portion of the pixel position as a basis for selecting the off-set value of each sub-pixel; this solution is clearly stated in each independent claim.

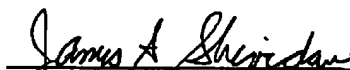
Importantly, there is no teaching, or suggestion, found in Peterson, which would lead to the adoption of the solution recited in the pending independent claims. The Examiner's broad statement quoted above cannot be expanded to anticipate or make obvious the specific approach claimed herein. Further, Peterson (and the other cited references) do not even recognize the specific problems identified and solved herein by the use of pixel position to derive offset values.

To provide a full scope of protection, new claims 23-28 are submitted dependant on Claim 22, and new claims 30-33 are submitted based on claim 29. Consideration and allowance of all these claims as well as amended claim 1 and its dependent claims 5-10 and 21 is respectfully requested.

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In view of these clear distinctions, reconsideration and allowance of the claims is respectfully requested.

Respectfully submitted,



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